



The Challenger™ Series

Features

- Patented double diaphragm
- NSF Standard 61, CE/PED, WRAS approved
- Stainless steel water connection
- Condensation reducing design
- Two part polyurethane, epoxy primed paint finish
- Leak free air valve cap sealed with closed cell foam
- Comprehensive testing
- No maintenance

Challenger™ tanks are ideally suited for a wide range of applications, including, booster systems, thermal expansion, heating expansion, irrigation systems, and hydraulic hammer arresting.

Water Chamber, Patented Controlled Action Design:

Efficient and cost effective, Challenger™ tanks are designed with a patented controlled action double diaphragm assembly. The double diaphragm assembly is clenched together with a positive lock internal clench ring which contains drawdown water in a pre charged air atmosphere. thus providing separation between the diaphragm and tank wall. This “air buffer” design means few problems with condensation.

Constructed with an FDA approved high grade butyl, the diaphragm assembly seals water in a true non-corrosive chamber.

The stainless steel port diffuser and system connection directs water into the tank agitating it as it enters, in order to suspend debris and solids to prevent clogging the port.

On the exterior, the almond colored two part polyurethane paint finish over an epoxy undercoating provides hundreds of hours of UV and salt spray protection.

The air chamber is sealed with a fixed o-ring and closed cell foam and will provide many years of leak free and service free life.

Challenger™ tanks are quality tested at several stages on the production line to insure the structural integrity of every tank.

Challenger™ tanks are the best pressure vessels available in the market today and represent the best value for the investment.



Challenger™ Series Models

Specifications

| Model #'s | | Dimensions | | | | | | | | Volume | | Shipping (box) | | Shipping (box) | |
|-----------|------|------------|--------|------|--------|------|--------|------|--------|--------|-----|----------------|--------|----------------|------|
| | | A | | B | | C | | D | | | | Volume | | Weight | |
| BSP | NPT | cm | inches | cm | inches | cm | inches | cm | inches | liter | gal | cu. M | cu. ft | kilos | lbs |
| GC60 | 115 | 57.1 | 22.5 | 40.6 | 16 | 4.8 | 1.9 | 32.4 | 12.75 | 60 | 14 | 0.1 | 3.65 | 12.46 | 27.5 |
| GC80 | 120 | 74.9 | 29.5 | 40.6 | 16 | 4.8 | 1.9 | 32.4 | 12.75 | 80 | 20 | 0.14 | 4.74 | 15.4 | 34 |
| GC100 | 125 | 88.9 | 35 | 40.6 | 16 | 4.8 | 1.9 | 32.4 | 12.75 | 100 | 26 | 0.16 | 5.68 | 18.57 | 41 |
| GC130 | 135 | 110.5 | 43.5 | 40.6 | 16 | 4.8 | 1.9 | 32.4 | 12.75 | 130 | 33 | 0.2 | 7.08 | 23.1 | 51 |
| GC170 | 145 | 93.9 | 37 | 53.3 | 21 | 5.59 | 2.2 | 43.1 | 17 | 170 | 44 | 0.29 | 10.14 | 29.9 | 66 |
| GC240 | 160 | 121.2 | 47.8 | 53.3 | 21 | 5.59 | 2.2 | 43.1 | 17 | 240 | 62 | 0.37 | 13.18 | 36.47 | 80.5 |
| GC310 | 180 | 150 | 59.1 | 53.3 | 21 | 5.59 | 2.2 | 43.1 | 17 | 310 | 81 | 0.46 | 16.25 | 45.4 | 100 |
| GC325 | 185 | 114.3 | 45 | 66 | 26 | 5.59 | 2.2 | 54 | 21.25 | 325 | 85 | 0.53 | 18.93 | 53.45 | 118 |
| GC450 | 1120 | 152.9 | 60.2 | 66 | 26 | 5.59 | 2.2 | 54 | 21.25 | 450 | 119 | 0.7 | 26.14 | 69.31 | 153 |

System Connection:

Models GC60 - GC450: 1" B.S.P. stainless steel elbow

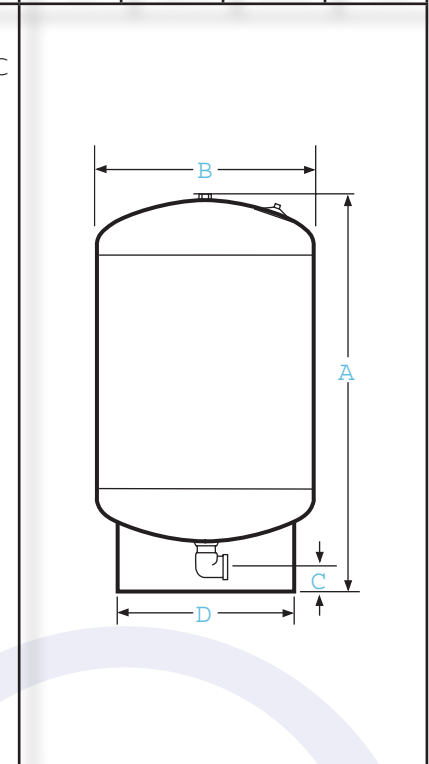
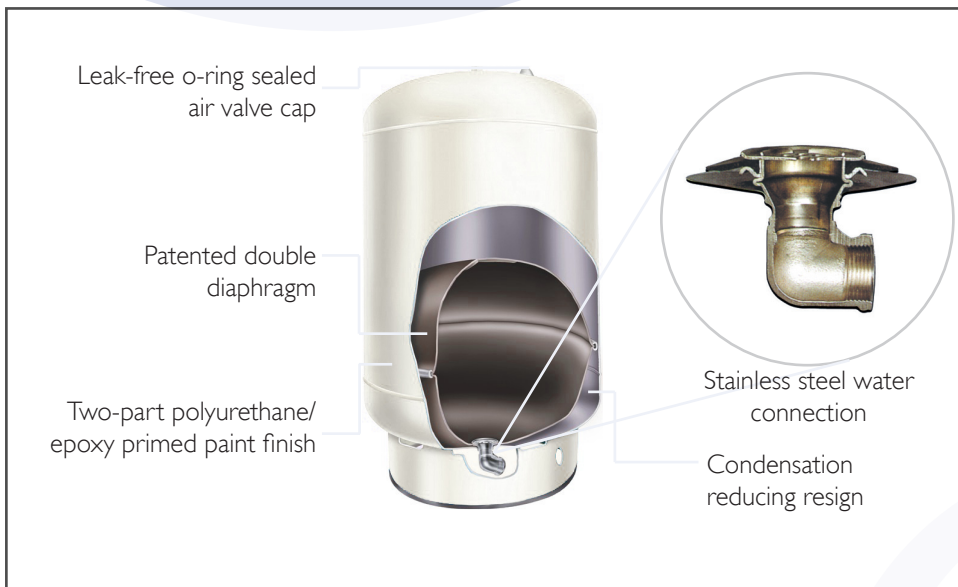
Models 115 - 135: 1" N.P.T. stainless steel elbow

Models 145 - 1120: 1 1/4" N.P.T. stainless steel elbow

Standard Precharge: 38 psi/2.6 bar

Maximum working temperature 200° F/ 90° C

Maximum working pressure 146 psi/ 10bar



Taiwan Facility

241 Sec. 1
Shen Lin Road
Daya, Taichung County
Taiwan
Tel: +886 4 2560 9763
Fax: +1 781 658 2511

US Facility

P.O. Box #782
300 Pond Street
Randolph, MA 02368
U.S.A.
Tel: +1 781 607 2607
Fax: +1 781 658 2511

Global Water Solutions

P.O. Box #415
Templar House
Don Road
ST. Helier Jersey
The Channel Islands